



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/050,619

01/16/2002

David C. Banks

56763.US

6452

408

7590

04/22/2004

LUEDEKA, NEELY & GRAHAM, P.C.
P O BOX 1871
KNOXVILLE, TN 37901

EXAMINER

BROWN, VERNAL U

ART UNIT

PAPER NUMBER

2635

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/050,619

Applicant(s)

DAVID BANKS

Examiner

Vernal U Brown

Art Unit

2635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2635

DETAILED ACTION

The application of David C. Banks for Vehicle anti-theft key with transponder filed 01/16/2002 has been examined. Claims 1-18 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 11-14, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacob et al. U.S Patent 6705141.

Regarding claims 1 and 11, Jacob et al. teaches a key assembly (figure 1) comprising: a key shank (30) having a blade portion and a handle portion (32), said handle portion having a thickness (figure 4); a transponder for receiving a wireless interrogation signal and transmitting a wireless response signal in response to the interrogation signal (col. 5 lines 21-30); a shuttle formed by an upper shell (11) forming a first planar surface and lower shell (12) forming a second planar surface for holding the key in place (col. 3 lines 37-40). Jacob et al. teaches opening (shank recess) for holding the key shank in place and having an obstruction for limiting the depth that the handle portion is received in the shank (col. 4 lines 23-30). Jacob et al. also teaches a transponder recess (col. 5 lines 31-32) having a receiving end for receiving the transponder and a terminal end having an obstruction for limiting the depth that the transponder is received in the transponder recess (figure 4); and a key head (22) integrally formed about the shuttle, transponder, and handle portion of the key shank (figure 3). Jacob

Art Unit: 2635

et al. is however silent on teaching the distance separated by the first and second surface of the shuttle is greater than the thickness of the shank handle portion. One skilled in the art recognizes that the distance separated by the first and second surface of the shuttle must be greater than the thickness of the shank handle portion in order for the handle of the shank to fit into the shuttle.

It would have been obvious to one of ordinary skill in the art for the first and second surface of the shuttle to be greater than the thickness of the shank handle portion in Jacob et al. because Jacob et al. suggests the shank handle fit into the shuttle and one skilled in the art recognizes that the distance separated by the first and second surface of the shuttle must be greater than the thickness of the shank handle portion in order for the handle of the shank to fit into the shuttle.

Regarding claims 2-3 and 12-13, Jacob et al. teaches the transponder (26) having both a cylindrical and rectangular shape (figure 4).

Regarding claim 4, Jacob et al. teaches the terminal end of the shank recess is closed (figure 4).

Regarding claim 5, Jacob et al. teaches the terminal end of the transponder recess (27) is closed (figure 4).

Regarding claim 6, Jacob et al. teaches handle portion (30) of said key shank is substantially rectangular (figure 4).

Regarding claims 7 and 14, Jacob et al. teaches the handle portion of the key shank is offset from the blade portion of the key shank, forming a shoulder adjacent the handle portion, said shank recess including a ledge for receiving the shoulder (figure 4).

Regarding claim 18, Jacob et al. teaches a key assembly comprising:

Art Unit: 2635

a key shank (31) having a blade portion and a handle portion (30) offset from the blade portion to form a shoulder adjacent the handle portion, said handle portion having a thickness (figure 4);

a transponder for receiving a wireless interrogation signal and transmitting a wireless response signal in response to the interrogation signal (col. 5 lines 21-30);

a shuttle formed by an upper shell (11) forming a first planar surface and lower shell (12) forming a second planar surface for holding the key in place (col. 3 lines 37-40).

a shank recess having an open receiving end for receiving the handle portion of the key shank (figure 4);

a terminal end in opposed relation to the open receiving end; and a ledge for receiving the shoulder of the key shank handle portion for limiting the depth that the handle portion is received in the shank recess (figure 4);

a transponder recess (27) having an open receiving end for receiving the transponder and a terminal end (the end wall of the transponder recess); and a key head (22) integrally formed about said shuttle, transponder, and handle portion of the key shank. Jacob et al. is however silent on teaching the distance separated by the first and second surface of the shuttle is greater than the thickness of the shank handle portion. One skilled in the art recognizes that the distance separated by the first and second surface of the shuttle must be greater than the thickness of the shank handle portion in order for the handle of the shank to fit into the shuttle.

It would have been obvious to one of ordinary skill in the art for the first and second surface of the shuttle to be greater than the thickness of the shank handle portion in Jacob et al. because Jacob et al. suggests the shank handle fit into the shuttle and one skilled in the art

Art Unit: 2635

recognizes that the distance separated by the first and second surface of the shuttle must be greater than the thickness of the shank handle portion in order for the handle of the shank to fit into the shuttle.

Claims 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacob et al. U.S Patent 6705141 in view of Mizuno et al. U.S Patent 5727408.

Regarding claims 8 and 15, Jacob et al. teaches means for attaching the shank handle to the upper and lower shell forming the shuttle (col. 5 lines 21-30) but is silent on teaching the handle portion includes two spaced apart legs and shuttle includes a single shank recess for receiving both legs. Mizuno et al. in an art related key device teaches a shank handle (112) having two spaced apart legs and a single shank recess for receiving both legs (figure 9).

It would have been obvious to one of ordinary skill in the art to for the shank handle portion to two spaced apart legs and shuttle includes a single shank recess for receiving both legs in Jacob et al. as evidenced by Mizuno et al. because Jacob et al. suggests means for attaching the shank handle to the upper and lower shell forming the shuttle and Mizuno et al. teaches having two spaced apart legs as a means of attaching the shank handle to the shuttle.

Claims 9 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacob et al. U.S Patent 6705141 in view of Thomas U.S Patent 4840586.

Regarding claim 9 and 16, Jacob et al. teaches a recess (27) for inserting the transponder and the recess is shaped in order to accommodate the transponder (figure 4) but is silent on teaching the recess is keyed. One skilled in the art recognized that parts that are attached or

Art Unit: 2635

inserted into each other are conventionally keyed in order to prevent improper connection as evidenced by Thomas (col. 1 lines 34-36).

It would have been obvious to one of ordinary skill in the art to key the transponder recess in order to ensure a proper orientation of the transponder in Jacob et al. as evidenced by Thomas because Jacob et al. suggests a recess (27) for inserting the transponder and the recess is shaped in order to accommodate the transponder and one skilled in the art recognized that parts that are attached or inserted into each other are conventionally keyed in order to prevent improper connection as evidenced by Thomas.

Claims 10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacob et al. U.S Patent 6705141 in view of Wendling et al. U.S Patent 4963106.

Regarding claims 10 and 17, Jacob et al. teaches a shuttle formed by an upper shell (11) forming a first planar surface and lower shell (12) forming a second planar surface for holding the key in place (col. 3 lines 37-40) but is silent on teaching the first and second surface are corrugated. One skilled in the art recognizes that corrugations are conventionally used in bonding surfaces together as evidenced by Wendling et al. (col. 2 lines 65-col. 3 line 5).

It would have been obvious to one of ordinary skill in the art for the first and second surface to be corrugated in Jacob et al. as evidenced by Wendling et al. because Jacob et al. suggests bonding the upper and lower surfaces and one skilled in the art recognizes that corrugations are conventionally use in bonding surfaces together as evidenced by Wendling et al.

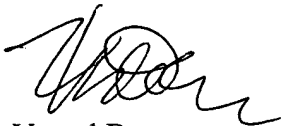
Art Unit: 2635

Conclusion

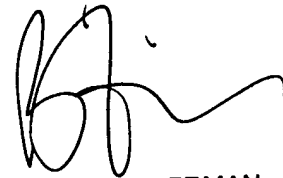
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vernal U Brown whose telephone number is 703-305-3864. The examiner can normally be reached on M-Th, 8:30 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 703-305-4704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.



Vernal Brown
April 18, 2004



BRIAN ZIMMERMAN
PRIMARY EXAMINER